

# COASTAL CONSERVANCY

Staff Recommendation

June 16, 2005

## MARIN FISH PASSAGE IMPROVEMENT PROGRAM

File No. 05-047

Project Manager: Michael Bowen

**RECOMMENDED ACTION:** Authorization to disburse up to \$196,500 to the County of Marin to fund a Marin Fish Passage Improvement Program for engineering and design of seven high priority fish passage improvement projects in the Woodacre and Redwood creek watersheds.

**LOCATION:** Woodacre Creek, tributary to San Geronimo Creek, to Lagunitas Creek, to Tomales Bay; and Redwood Creek, tributary to the Pacific Ocean near Muir Beach, Marin County (Exhibit 1).

**PROGRAM CATEGORY:** SF Bay Conservancy Program and Resource Enhancement

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### **EXHIBITS**

Exhibit 1: Project Location and Site Map

Exhibit 2: Letters of Support

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### **RESOLUTION AND FINDINGS:**

Staff recommends that the State Coastal Conservancy adopt the following Resolution pursuant to Sections 31160-31164 and 31251-31270 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed one hundred ninety-six thousand five hundred dollars (\$196,500) to the County of Marin (“County”) to conduct final design and engineering activities for at least seven high priority fish passage improvement projects in the Woodacre and Redwood creek watersheds as part of the Marin Fish Passage Improvement Program, subject to the condition that, prior to disbursement of any funds, the County shall submit for the review and approval of the Executive Officer of the Conservancy a work plan, schedule, budget, and the names of any contractors to be employed.”

Staff further recommends that the Conservancy adopt the following findings:

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“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed project is consistent with the purposes and criteria set forth in Chapter 4.5 of Division 21 of the Public Resources Code (Sections 31160-31164) regarding the protection and enhancement of resources in the San Francisco Bay Area.
2. The proposed project is consistent with the purposes and criteria set forth in Chapter 6 of Division 21 of the Public Resources Code (Sections 31251-31270) regarding the enhancement of coastal resources.
3. The proposed project is consistent with the Project Selection Criteria and Guidelines adopted by the Conservancy on January 25, 2001.”

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**PROJECT SUMMARY:**

The proposed project provides for the planning and design of fish barrier removal projects throughout the Woodacre and Redwood Creek watersheds. By evaluating natural channel processes, fish habitat, and fish passage through existing road crossings on Woodacre and Redwood Creeks, the project will identify structures that impede natural channel processes and impair the biological productivity of salmonids within the watersheds. The final report issued by the County will include a technically detailed description of the watersheds, the quality of their fish habitat, and ready-to-build designs and permit application materials for at least seven specific fish passage improvement and habitat enhancement projects throughout the two watersheds. The County will also provide all necessary CEQA documentation, as well as all permits, consultations, and consistency determinations as part of its Marin Fish Passage Improvement Program.

The objective of the project is to restore in a timely fashion healthy populations of coho salmon and steelhead to Marin’s coastal watersheds, including Woodacre Creek, one of the most important salmon production subwatersheds in the Lagunitas Creek watershed, and Redwood Creek. Woodacre Creek currently produces approximately eleven percent of the spawning productivity in the Lagunitas system, and could provide much more if free passage would be afforded the migratory salmon and steelhead of that watershed. In addition, the County seeks to conduct a similar effort in Redwood Creek, another highly important coho salmon and steelhead stream.

The enhancement potential for Woodacre creek is high for a variety of reasons. First, the watershed already meets the general criteria for coho salmon use, and the subwatershed hosts approximately eleven percent of the spawning Coho salmon in the Lagunitas Creek watershed. However, Coho are prevented from using many portions of the creek by a series of barriers to fish passage, including road crossings at Carson Road, Garden Way (2), Oak Grove Avenue, Crescent Drive, and Redwood Drive. Enhancement opportunities are similarly good for Redwood Creek, and the barrier at Muir Woods Road is a high priority for fish passage improvement efforts.

Second, the County has committed substantial resources to developing a long-term resource

enhancement program for its watersheds, including the establishment of a Public Works Program specifically dedicated to fish passage improvement. Third, the Point Reyes National Seashore is conducting a variety of other enhancement measures nearby the Lagunitas Creek watershed, such as the Bear Valley Creek Watershed Enhancement Program, Olema Marsh and Giacomini Wetland restorations, and other projects that will further improve nearby habitat. Last, and perhaps most importantly, the proximity of relatively stable coho and steelhead populations in the Lagunitas creek watershed promise rapid recolonization, of areas currently closed or partially inaccessible to migrating salmon and steelhead. This and other projects will ensure improved connectivity of habitat with Tomales Bay and the ocean.

Redwood Creek already hosts a stable population of coho salmon that will benefit from the augmentation of available habitat. The County will evaluate conditions in the Redwood Creek watershed, which drains through Muir Woods to the Pacific Ocean.

In order to achieve its fish passage improvement objectives, the County proposes to launch a program that will provide ready-to-construct designs, permits and CEQA documents for six high-priority fish passage improvement projects in Woodacre Creek, and one project in Redwood Creek. The County will then seek to implement these ready-to-build projects immediately following design and permitting. These projects will meet state and federal fish passage criteria, thereby restoring natural hydrologic process and connectivity. The County will also plan for the restoration and enhancement of riparian habitat, preparing for activities that improve habitat for fisheries as well as neotropical migratory birds, rare plants, and other species. In anticipation of project implementation, the County will provide all necessary CEQA documentation, as well as all permits, consultations, and consistency determinations as part of the Marin Fish Passage Improvement Program.

**Site Description:** Woodacre Creek is a tributary of San Geronimo Creek, which, in turn is a tributary of Lagunitas Creek and Tomales Bay. The Lagunitas Creek watershed, 103 square miles in size, is the largest watershed in Marin County and represents the largest drainage area into Tomales Bay and the Farallones National Marine Sanctuary. Draining a large part of the central portion of West Marin, it flows from its headwaters on the north slope of Mt. Tamalpais. It traverses four reservoirs to the southern end of Tomales Bay. Woodacre Creek and its East and West Forks are important spawning and rearing grounds for coho salmon. Much of the historic habitat for steelhead and salmon in this watershed was lost with the construction of the four reservoirs.

Redwood Creek drains an 8.9 square-mile watershed from the west peak of Mt. Tamalpais to its mouth at Muir Beach. Approximately seven miles of Redwood Creek provide accessible habitat for anadromous salmonids, and this basin is considered one of the most productive and restorable basins for anadromous salmonid habitat in Marin County. It is largely undeveloped, and its resources are protected as State and Federal parkland.

**Project History:** The Coastal Conservancy has made substantial commitments over the years to protecting and enhancing the coastal watersheds of Marin County. The Conservancy has been especially active in Tomales Bay and its 232 square mile watershed, an area noted for its beauty and diversity of wildlife.

Through acquisitions and easements, the Conservancy, largely in partnership with the Marin Agricultural Land Trust, has helped protect from development thousands of acres of agricultural land in West Marin.

A Conservancy authorization to the Marin Resource Conservation District in 1991 enabled the RCD and its partner the Tomales Bay Watershed Council to complete a watershed assessment for Tomales Bay. This, in turn, led to the Conservancy's disbursement of \$600,000 in 2001 to the Marin Resource Conservation District to implement the Tomales Bay Watershed Enhancement Program, guided by 16 restoration practices outlined by the Marin Coastal Watersheds Permit Coordination Program.

The Conservancy granted \$35,000 to the Urban Creeks Council on August 2, 2001 to design a fish passage improvement project at the Woodacre Creek Improvement Club. Unfortunately, that project has not yet been built, but it has gone to bid, and is expected to be constructed this summer.

The Conservancy also granted sixty-five thousand dollars to the County of Marin to conduct an assessment of barriers obstructing passage of anadromous fish within the coastal watersheds of Marin County. Some of the barriers identified in the 2002 report are those now proposed for further analysis prior to modification or removal.

At its May 18, 2005 meeting, the Conservancy authorized \$225,000 to the Point Reyes National Seashore Association to conduct a similar fish passage improvement program for nearby Bear Valley Creek, also a tributary of Lagunitas Creek.

County staff initially contacted Conservancy staff in early 2004 regarding the proposed project. On April 18, 2005, County staff filed an application for the proposed project with the Conservancy, and Conservancy staff has worked with the County and the Association over the last year to develop the goals, objectives, and terms of the proposed grant.

#### **PROJECT FINANCING:**

Coastal Conservancy	\$196,500
County of Marin ( <i>Biological and Technical Services</i> )	\$44,000
<b>Total Project Cost</b>	<b>\$240,500</b>

The expected source of Conservancy funds for this project is the appropriation to the Conservancy from the Safe Neighborhood Parks, Clean Water, Clean Air and Coastal Protection Bond Act of 2000 (Proposition 12), Coastal Salmon Funds. The County will provide approximately \$44,000 of in-kind contributions in the form of data collection, technical analyses, project design, and permit material preparation for pre-implementation planning purposes.

**CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:**

The proposed project is undertaken pursuant to Chapter 4.5 and Chapter 6 of Division 21 of the Public Resources Code (Sections 31160-31164 and Sections 31251-31270, respectively), as follows:

Pursuant to Section 31162(b), the Conservancy is authorized to protect, restore, and enhance watersheds within the nine county San Francisco Bay Area. Consistent with this section, the proposed project will lead to the enhancement of two Marin County watersheds of tremendous importance for anadromous salmonids.

Pursuant to Section 31162(d), the Conservancy shall promote, assist, and enhance projects that provide open space and natural areas that are accessible to urban populations for recreational and educational purposes. The planning for the enhancement of anadromous fish bearing streams and associated interpretive and educational opportunities serves this purpose.

Pursuant to Section 31163(d) the "Conservancy shall utilize the criteria specified in this subdivision to develop project priorities for the San Francisco Bay Area Conservancy Program that provide for development and acquisition projects...." The proposed project (1) is supported by adopted local plans; (2) serves a regional constituency; (3) can be implemented in a timely way; (4) provides opportunities for benefits that could be lost if the project is not quickly implemented; and (5) includes matching assistance from other sources.

Pursuant to Section 31251, the Conservancy may award grants to local public agencies and non-profit organizations for the purpose of enhancement of coastal resources which, because of human-induced events, or incompatible land uses, have suffered loss of natural and scenic values. Consistent with this section, the proposed authorization provides funds to the County to enhance coastal fishery resources disturbed by incompatible land uses, such as inappropriate culvert installation.

Pursuant to Section 31252, all areas proposed for resource enhancement should be identified in a certified local coastal plan or program as requiring public action to resolve existing or potential resource problems. Woodacre and Redwood creeks meet the criteria of coastal streams established within the Unit II LCP for Marin County, and are therefore subject to the protections, goals, and objectives afforded by Section 30231 of the Coastal Act which establishes that "the biological productivity and the quality of coastal waters...shall be maintained and, where feasible, restored..." (LCP II-II, p. 56).

Finally, pursuant to Section 31253, "(the) Conservancy may provide up to the total of the cost of any coastal resource enhancement project..." and the amount of the Conservancy contribution shall be determined only after an assessment of funding generally available and other factors. The proposed contribution by the Conservancy was determined based on application of priority criteria, as discussed below, and after taking into account other available resources and the matching contributions to the project by other funding sources.

**CONSISTENCY WITH CONSERVANCY'S  
STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):**

Consistent with **Goal 6 Objective A** of the Conservancy's Strategic Plan, the proposed project will contribute to the development of approximately 70 plans and projects that preserve and restore coastal watersheds and create river parkways.

Consistent with **Goal 6 Objective A(1)** of the Conservancy's Strategic Plan, the proposed project will leverage the results of the recently completed study of barriers to fish passage, through the implementation of projects to improve habitat for anadromous fish. The proposed authorization will enable the Conservancy, in concert with the grantee, to prepare to increase available habitat for aquatic species, notably salmon, by planning to remove instream barriers to their free migration. By employing the Conservancy's recently completed report, "An Inventory of Barriers to Fish Passage in California's Coastal Watersheds," as well as the expertise of the grantee, the Conservancy will ensure measurable increases in available habitat and, presumably, measurable increases in anadromous fish populations within and above the project areas.

**CONSISTENCY WITH CONSERVANCY'S  
PROJECT SELECTION CRITERIA & GUIDELINES:**

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines adopted January 24, 2001, in the following respects:

**Required Criteria**

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Support of the public:** Supporters of this project include the National Park Service: Point Reyes National Seashore, the National Oceanic and Atmospheric Administration: National Marine Fisheries Service, the Department of Fish and Game, the Regional Water Quality Control Board: San Francisco Bay Region, and the County of Marin: Department of Public Works. Letters of support are included in Exhibit 2.
4. **Location:** The Woodacre Creek watershed is located in western Marin County. The nearest town is Woodacre. Redwood Creek is located in southwestern Marin, flowing off the slopes of Mt. Tamalpais, and entering the Pacific Ocean at Muir Beach. For additional details, see "Site Description," above.
5. **Need:** The proposed project provides a much-needed augmentation to the County's ambitious enhancement program, and ensures the timely implementation of important coho salmon restoration opportunities.
6. **Greater-than-local interest:** Lagunitas Creek, to which Woodacre Creek is tributary, is identified as a rank 5, or highest priority recovery site in The Recovery Strategy for California Coho Salmon. This project is consistent with recommendation BM-LA-03, which

states “(c)oorinate with appropriate agencies to restore coho salmon passage at barriers identified by Ross Taylor, SPAWN, and others.” Redwood Creek is also so ranked in the Coho Plan. Recommendation BM-BO-08 states “(t)reat coho salmon passage barriers in the Redwood Creek drainage.”

### **Additional Criteria**

7. **Urgency:** Coho salmon are currently at 6 to 15% of their abundance during the 1940s. Given this decline, and in light of the State Recovery Strategy’s primary objective of returning coho salmon to a level of sustained viability, while protecting their genetic integrity, enhancement projects with a high potential for recovering local populations of coho salmon are a high priority for the State.
8. **Leverage:** See the “Project Financing” section above.
9. **Innovation:** The County of Marin has approved a long-term, Public Works Department program for addressing habitat and fish passage barrier problems associated with County infrastructure. This foresight and dedication to resolving a challenging issue of resource degradation is commendable and innovative.
10. **Readiness:** The project applicant has demonstrated that it has the expertise, local public support, and administrative capability necessary to commence and complete the project in a timely fashion.
11. **Realization of prior Conservancy goals:** The Conservancy has worked with a variety of partners to explore options for protecting and improving aquatic and terrestrial habitat in and around Tomales Bay, including numerous acquisitions, easements, and funding a Tomales Bay Watershed Management Plan. Water quality protection and fishery enhancement are key objectives of this Plan. The Conservancy also is dedicated to the enhancement of all of Marin’s coastal streams, including Redwood Creek.
12. **Cooperation:** County staff, the Department of Fish and Game, and others have all expressed support for, and a willingness to cooperate in accomplishing the project.

### **CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:**

Project sites are located on County property, outside of the Coastal Zone. However, the projects are designed to enhance coastal resources.

The proposed project will result in the development of ready-to-build designs for fish passage improvement projects for the Woodacre and Redwood Creek watersheds, projects that will enhance the scenic values and wildlife habitat values of the watershed. The proposed project is therefore consistent with the Coastal Act, sections 30231 and 30251, as follows.

Coastal Act Section 30231 states that “(t)he biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained, and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of groundwater supplies and

substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.” By planning for the reversal and correction of inappropriate land use practices, the proposed project will expand, protect and enhance the aquatic and riparian habitat of Woodacre and Redwood creeks for the benefit of federally listed salmonids and migratory songbirds. The proposed project is therefore consistent with this section.

Section 30251 of the Act states, in part, that “(t)he scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance.” The proposed project will provide plans for the protection and enhancement of an already scenic coastal area by planning for the restoration of hydraulic connectivity and fish passage for Woodacre Creek and Redwood Creek.

The Marin County Local Coastal Program Unit 1 and 2 Land Use Plans identify Marin’s numerous coastal zone streams and creeks as sensitive habitats for many species of birds and fish. Lagunitas Creek, of which Woodacre is a tributary, contains runs of coho and steelhead specifically highlighted (Marin County Local Coastal Program Unit 2 Land Use Plan, Pg. 65). Redwood Creek, too, is specifically highlighted (The Marin County Local Coastal Program Unit 1 Land Use Plan, Pg. 17).

Freshwater inflows, sedimentation, water pollution, and protection of riparian habitats are identified as the key concerns for protecting the aquatic resources of the Lagunitas Creek watershed, and the Tomales Bay ecosystem into which Lagunitas flows (ibid, pp. 66-67), as well as for Redwood Creek (pp. 15-21). Because the proposed project will provide plans to restore salmonid access to and hydraulic connectivity for the Woodacre and Redwood Creek watersheds, re-create riparian habitat where it has been lost, restore the natural meander and in stream habitat of the project areas, improve sediment flushing by restoring natural geomorphologic processes, and open up previously unavailable habitat, the proposed project is entirely consistent with the Local Coastal Program Policies.

#### **COMPLIANCE WITH CEQA:**

Preparation of the Marin Fish Passage Improvement Program involves only data gathering, planning, and feasibility analyses for possible future actions and is thus statutorily exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to 14 California Code of Regulations §15262. Staff will file a Notice of Exemption upon approval.